



CORE QUESTIONS

SEPTEMBER 12, 2006



Securing Clean and Affordable Water: A Symposium

Obtaining reliable sources of clean water in the USA at affordable rates is very often not possible. The EPA states that almost \$190 billion will need to be dedicated over the next 20 years for compliance with the federal Clean Water Act. Further, EPA forecasts that about \$138 billion will be required over the next 20 years to replace or upgrade the nation's aging water infrastructure (treatment plants, reservoirs, pipes, and storage tanks) to comply with the federal Safe Drinking Water Act (SDWA).

All of these privately-owned water utilities face significant difficulties in complying with increasingly stringent water quality regulations, and the smaller water utilities often face additional challenges such as a lack of economies of scale, restricted capital access, managerial limitations, and insufficient technical expertise to comply with those standards. There are 137 privately-owned water utilities in California, and only 13 have more than 2,000 customers each. Panel members will address the critical challenges encountered by private water utilities in California, with special focus on small private water utilities.

This symposium will identify the current and emerging quality standards for drinking water (and to a lesser extent, wastewater) which pose extensive challenges for water utilities in California (panel #1). The existing and emerging water quality treatment technologies which are most technically and economically viable for compliance with the new standards will be addressed (panel #2). The alternatives for public-private partnerships which could improve private water utilities' financial viability will be identified (panel #3). Finally, a discussion will summarize several of the optimal means for accessing clean and affordable water for private water utility ratepayers (panel #4).

Panel Discussions will address these critical questions:

Panel #1: Existing and Emerging Water Quality Standards

Existing Standards

- 1) What are the respective responsibilities of the U.S. EPA, DHS, and SWRCB in setting and enforcing standards?
- 2) Which existing water quality standards are the most difficult for water utilities to meet? Why?
- 3) What are the total costs (both quantifiable and non-quantifiable) of meeting these standards?
- 4) What are the total benefits (both quantifiable and non-quantifiable) of meeting these standards?
- 5) What have been the most successful means for complying with these standards?
- 6) How has nonpoint source pollution been addressed in current standards?

Emerging Standards

- 1) Which emerging water quality standards are the most difficult for water utilities to meet? Why?
- 2) Can new EPA rules, such as the Long Term 2 Enhanced Surface Water Treatment rule, and Disinfection Byproducts rule, be implemented by small water utilities without causing substantial financial difficulties?
- 3) What are the total costs (both quantifiable and non-quantifiable) of meeting these standards?



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- 4) What are the total benefits (both quantifiable and non-quantifiable) of meeting these standards?
- 5) What are expected to be the most successful means for complying with these standards?
- 6) How is nonpoint source pollution being addressed in emerging standards?

Panel #2: Existing and Emerging Water Quality Treatment Technologies

- 1) What are the most significant challenges encountered by water utilities in complying with EPA and DHS standards?
- 2) What are the most successful current technologies for complying with EPA and DHS standards?
- 3) What are expected to be the most successful emerging technologies for complying with EPA and DHS standards?
- 4) What are the strategies used by water utilities to meet water quality standards, and water quality demand?
- 5) What are the comparative advantages of centralized water treatment versus point-of-use for water utilities? Is a 2-tier, dual-quality service offering viable?

Panel #3: Increasing the Long-Term Viability of Water Utilities

- 1) Which legal impediments pose the greatest challenge to public-private partnerships to increase the viability of water utilities in California?
- 2) What legal solutions could best facilitate effective public-private partnerships?
- 3) Which political impediments pose the greatest challenge to public-private partnerships to increase the viability of water utilities in California?
- 4) What political solutions could best facilitate effective public-private partnerships?
- 5) Which financial impediments pose the greatest challenge to public-private partnerships to increase the viability of water utilities in California?
- 6) What financial solutions could best facilitate effective public-private partnerships?
- 7) Which structural impediments pose the greatest challenge to public-private partnerships to increase the viability of water utilities in California?
- 8) What structural solutions could best facilitate effective public-private partnerships?

Panel #4: Accessing Clean and Affordable Water: A Discussion

- 1) What are the strategies to assure water quality and reliability when the needed infrastructure requires high rates and/or large rate increases?
- 2) What are the financing tools and alternatives for funding infrastructure to ensure water quality and reliability?
- 3) Are there organizational issues and structures that help achieve water quality and reliability (e.g. mergers; consolidation; regionalization)?
- 4) Are there special or unique strategies for smaller water companies to have the financial resources and expertise to provide sufficient water quality and reliability?
- 5) Would a public campaign to educate ratepayers and public officials of the true costs of supplying quality water help to decrease resistance to the critical need for cost-based rate increases?